



7-14-04

AF 1625 #
CC
JW

427.046

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: : R. Desai
D. BIGG et al :
Serial No.: 09/806,952 : Group: 1625
Filed: April 5, 2001 :
For: OPTICALLY...ANALOGUES :

475 Park Avenue South
New York, N.Y. 10016
July 13, 2004

RESPONSE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Responsive to the advisory action of March 12, 2004, Applicants request reconsideration of the application in view of the remarks presented herein.

The claims in the application are claims 5, 24, 26 and 27, all other claims having been cancelled.

All of the claims have been rejected as being based upon a combination of the Hauseer '727 reference and the Lavergne '427 reference. The Examiner states "The reference clearly teaches that hcpt and cpt are equivalent but Applicants in their arguments in the paper filed September 12, 2003 indicate that they are equivalent." This statement by the Examiner does not make sense. The Examiner states that Applicants' arguments are not convincing since "the reference" teaches a superiority of hcpt over cpt and the Examiner deems it would be obvious to use hcpt over the cpt for the same use.

According to the Examiner, Hauseer et al teaches the Si containing group on the same position making it more soluble and thus, it would be obvious to make hcpt more soluble by having the Si group thereon.

Applicants respectfully traverse this ground of rejection since it is deemed that the combination of the references, which the Examiner has made with the benefit of Applicants' disclosure, would in no way suggest to one skilled in the art Applicants' novel compounds and their use. The Hauseer et al reference teaches cpt compounds wherein R_1 has a wide variety of substituents. R_1 could be acyl of an alkanoic acid, alkenic acid, alkynyl acid or an aryl acid or R_1 could be alkenyl or alkynyl optionally substituted with at least one halogen hydroxyl group, alkyl or alkoxy group or R_1 could be halo-oxo or $-S-R_3$ or $-S(O)-alkyl$ or $-OSO_2CF_3$ or $-SiR_8R_9$ and R_{10} or $-R_5-SiR_8, R_9$ and R_{10} or $-S-R_5-SiR_8R_9$ and R_{10} and it is stated that all these groups can assist in making the cpt compounds more soluble. There is no teaching of any specific Si substituent and there is advantage over the other compounds.

The Lavergne reference cited by the Examiner merely states that certain hcpt compounds having in Applicants' substitution, X which can be hydrogen or ethyl and teaches that the beta-hydroxy lactone compound B 80245 which is unsubstituted in Applicants' position, is a much weaker electrofilli than cpt and is a potent inhibitor of topoisomerase I activity and a potent cytotoxic agent. In order not to unduly burden the record, Applicants incorporate by reference the arguments concerning the deficiencies of

the Hausser reference set forth on pages 2 to 5 and especially the table set forth on page 5 which shows the superiority of the present silyl compounds as compared to the corresponding compounds substituted with butyl or phenyl and this is completely unexpected and not taught by the prior art cited by the Examiner.

Applicants have clearly shown that the hcpt and cpt compounds are non-equivalent structures as taught by the prior art submitted with the response of September 12. In contrast to cpt, the key feature of hcpt derivatives is their better stability and a slow and irreversible E-ring opening and with hcpt, there is no stability problem or equilibrium problem to solve. This clearly shows that the two structures are non-equivalent and one would not combine the teaching of a cpt reference with an hcpt reference.

Moreover, the Biochemistry reference already of record clearly shows that there is a difference in the cleavage sites of the DNA by cpt and hcpt which are different in their molecular environment. Therefore, one would not readily combine the teaching of hcpt compounds with the teachings of cpt compounds. In addition, Applicants have submitted Pharmaceutical Design which clearly demonstrates the differences between the two. Therefore, one skilled in the art would not combine the references without the benefit of Applicants' teachings. Therefore, withdrawal of this ground of rejection is requested.

In view of the above remarks, it is believed that the claims clearly point out Applicants' patentable contribution and favorable reconsideration of the application is requested.

Respectfully submitted,
Muserlian, Lucas and Mercanti



Charles A. Muserlian, 19,683
Attorney for Applicants
Tel.# (212) 661-8000

CAM:ds
Enclosures